Supplementary Materials: Directed Self-Assembly on Photo-Crosslinked Polystyrene Sub-Layers: Nanopattern Uniformity and Orientation

Haeng-Deog Koh and Mi-Jeong Kim

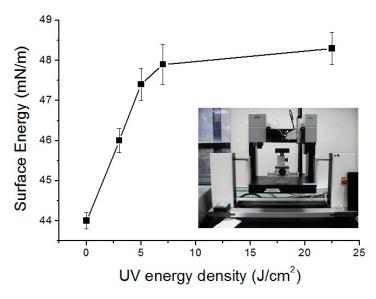


Figure S1. Change in surface energy of photo-crosslinked PS films with increasing UV irradiation energy (wavelength: 254 nm), as measured from the contact angle of two different solvents, i.e., water and diiodomethane. Inset: photo image of the contact angle analyzer instrument, DSA100.

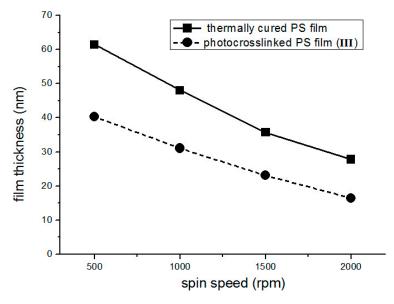


Figure S2. Change in thickness of photo-crosslinked PS film (**III**, dashed line) with initial thickness of thermally annealed PS-OH multilayer film (solid line).

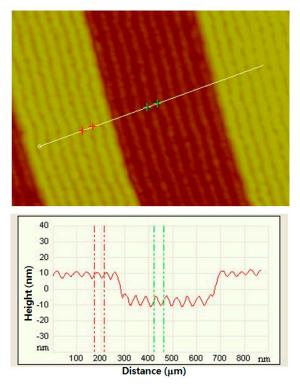


Figure S3. AFM image and height profile of single-layered cylinder arrays covering whole areas on the mesa and the trench.

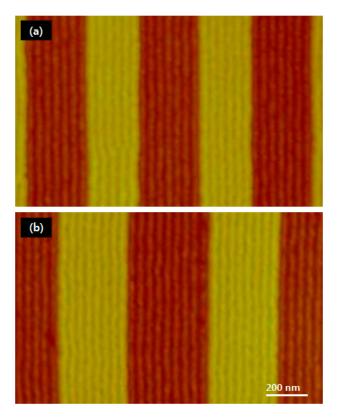


Figure S4. Single-layer PS-*b*-PMMA parallel half-cylinder arrays on whole areas of mesa/trench with a 1:1 ratio: (a) 280 nm and (b) 350 nm trench widths.